Abstract of the Disclosure:

In an area of a diaphragm 5 as an infrared photosensitive portion of a thermal infrared detector, a fourth dielectric protective film 8c is etched and reduced in thickness to form a fifth dielectric protective film 8d so that the thickness of the diaphragm 5 as a whole is reduced. With this structure, the thermal capacity of the diaphragm 5 is decreased and the thermal time constant is reduced. This enables the thermal infrared detector to be operated at a high frame rate. A bolometer thin film 7 is formed throughout an entire surface of the diaphragm 5.